

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,649	07/31/2003	Carl Schoeneberger	NUASI-00102	3555
7590 05/10/2005			EXAMINER	
Thomas B. Haverstock HAVERSTOCK & OWENS LLP			JUNTIMA, NITTAYA	
162 North Wolfe Road			ART UNIT	PAPER NUMBER
Sunnyvale, CA 94086			2663	
			DATE MAILED: 05/10/2004	ς.

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/632,649	SCHOENEBERGER ET AL.			
		Examiner	Art Unit			
	The MAILING DATE of the	Nittaya Juntima	2663			
Period for	The MAILING DATE of this communication ap Reply	pears on the cover sheet \	vith the correspondence address			
THE N - Extens after S - If the p - If NO p - Failure Any re	PRTENED STATUTORY PERIOD FOR REPLIALING DATE OF THIS COMMUNICATION ions of time may be available under the provisions of 37 CFR 1. IX (6) MONTHS from the mailing date of this communication. It is increased in the provision of t	136(a). In no event, however, may a oly within the statutory minimum of th will apply and will expire SIX (6) MC te, cause the application to become	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)⊠ I	Responsive to communication(s) filed on <u>15 i</u>	November 2004.				
2a)□ ⁻	This action is FINAL. 2b)⊠ This action is non-final.					
3)□ ;	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.			
Disposition	on of Claims					
5) 🔯 (6) 🔯 (7) 🔯 (Claim(s) <u>1-90</u> is/are pending in the application of the above claim(s) <u>33-42,53,77 and 82</u> Claim(s) <u>1-32,56-68,80,81 and 83-90</u> is/are a Claim(s) <u>43-52,69 and 72-76</u> is/are rejected. Claim(s) <u>54,55,70,71,78 and 79</u> is/are objected. Claim(s) are subject to restriction and/	is/are withdrawn from co llowed. ed to.	nsideration.			
Application	on Papers					
10)⊠ T	The specification is objected to by the Examination in the drawing(s) filed on 31 July 2003 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct the oath or declaration is objected to by the Example.) ☐ accepted or b) ☒ object e drawing(s) be held in abeya ction is required if the drawir	nnce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
a)[Acknowledgment is made of a claim for foreignal All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Bureace the attached detailed Office action for a list	nts have been received. Its have been received in ority documents have been au (PCT Rule 17.2(a)).	Application No n received in this National Stage			
2) Notice 3) Inform	s) of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 No(s)/Mail Date 11/8/04,1/18/05.	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152)			

DETAILED ACTION

- 1. This action is in response to the amendment filed on 11/15/2004.
- 2. The objections to the specification and claims, and the rejection under 35 U.S.C. 112, second paragraph are withdrawn in view of applicant's amendment.
- 3. Claims 33-42 were withdrawn as being a non-elected invention, and claims 53, 77, and 82 have been cancelled as per applicant's amendment.
- 4. Claims 1-32, 56-68, 80-81, and 83-90 are allowed.
- 5. The indicated allowability of claims 53 and 77 is withdrawn in view of the newly discovered reference(s) to Copeland et al. (USPN 6,615,25 B1). Claims 43-52, 69, and 72-76 are presently rejected under 35 U.S.C. 103(a) and rejections based on the newly cited reference(s) follow.
- 6. Claims 54-55, 70-71, and 78-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

- 7. Claims 1, 14, 24, 44, 56, 71, and 80 are objected to because of the following informalities:
- claim 1, ll 9, "a lost voice call" may be changed to "a lost voice call of the at least one voice call" or "the at least one voice call that is lost" to provide a relationship between the lost call and the voice call in step a and, therefore, put the claim in a better form. The same

Art Unit: 2663

also applies to "a lost voice call" and "a lost call" in claim 14, ll 1, claim 24, ll 1-2, claim 44, ll 3,

Page 3

claim 56, Il 7, claim 71, Il 1-2, and claim 80, Il 15.

Appropriate correction is required.

Drawings

The drawings are objected to because in items 500-503 in Fig. 4 and item 600 in Fig. 5 8.

require descriptive text labels, e.g. 500 should be labeled as "a SIP pakcet."

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2663

Claim Rejections - 35 USC § 103

Page 4

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 43-49, 50-52, 69, and 72-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donovan (USPN 6,434,143 B1) in view of Copeland et al. ("Copeland") (USPN 6,615,235 B1).

Regarding claim 43, as shown in Fig. 1, Donovan teaches a gateway (21a) configured to receive a voice call (voice call received at gateway 21a prior to an INVITE request sent from gateway 21a during call setup, col. 3, ll 17-19) from the voice telephony network (an inherent voice network having PBX 19a, col. 2, ll 65-67), wherein the gateway is coupled to at least one hub (at least one hub reads on a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside), and a proxy table (a proxy table, i.e. routing/forwarding table, must be included in gateway 21a for forwarding an INVITE request to a proxy server- NS 23, col. 3, ll 10-12 and 17-19), the gateway sends the voice call to a proxy server (NS 23) (SIP is sent from gateway 21a to NS 23, col. 2, ll 65-col. 3, ll 1-4 and 17-23).

Donovan fails to teach a plurality of gateways and the proxy table that selects the appropriate one of the at least one proxy server based on a priority scheme as recited in the claim.

Art Unit: 2663

Regarding a plurality of gateways, an official notice is taken that a plurality of gateways, e.g. two or more gateways working in similar fashion as gateway 21a may be implemented to serve two or more groups of customers. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Donovan such that a plurality of gateways would be included as recited in the claim. The suggestion/motivation to do so would have been to accommodate an increase in VoIP call volume/users in which such modification involves only routine skill in the art.

Regarding the proxy table, in an analogous art, Copeland teaches, as shown in Fig. 2, a sprayer 210 (a gateway) having a sprayer's list (a proxy table) of available web server nodes (at least one proxy server) and the sprayer's list must be used to select the appropriate one of the web server nodes (at least one proxy server) based on a load distribution and availability (priority scheme), i.e. sprayer 210 is used to distribute HTTP requests (sending call to at least one proxy) evenly among the web servers (at least one proxy server) (col. 4, ll 44-col. 5, ll 5).

Given the teaching of Copeland, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Donovan such that the proxy table that selects the appropriate one of the at least one proxy server based on a priority scheme would be included as recited in the claim. The suggestion/motivation to do so would have been to enable the gateways to evenly distributing the calls to the available proxy servers as taught by Copeland (col. 4, ll 66-col. 5, ll 5).

Regarding claim 45, Donovan teaches that *the hub* (a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside, Fig. 1) is configured to receive voice call from the gateway (SIP portion is received by NS 23

Art Unit: 2663

and RTP portion is received by IMS 25, col. 3, ll 17-23, see also col. 1, ll 24-31 and 58-62) and a voice call is divided into *a SIP portion and a RTP portion* (col. 2, ll 67-col. 3, ll 1-4, and 8-10, see also col. 1, ll 24-32).

Regarding claim 46, Donovan teaches that *a proxy server* (NS 23) in *the hub* (a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside, Fig. 1) is configured to receive the SIP (signaling) portion of the voice call (col. 3, ll 10-23).

Regarding claim 47, Donovan teaches that *a media server* (IMS 25) in *the hub* (a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside, Fig. 1) is configured to receive *the RTP portion* (voice) for the voice call (col. 1, ll 24-31 and 58-62).

Regarding claims 48 and 72, Donovan teaches that *the hub* (a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside, Fig. 1) includes *an application server* (not defined, reads on a location manager 31) coupled by *an interface logic* (not defined, reads on an output port on the location manger 31 connected to NS 23) to communicate with *the proxy server* (NS 23) and *a media server* (IMS 25) (col. 3, Il 24-39).

Regarding claims 49 and 73, as shown in Fig. 1, Donovan teaches that *at least one node* (not defined, reads on a location where network server 23 and integrated messaging system 25 reside, excluding the service control entity 29 and location manager 31) coupled to *the hub* (a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside) with *a wide area network* (Internet 17) connection,

Art Unit: 2663

wherein the node includes *a single proxy* (NS 23, col. 3, ll 10-12) and *a single media server* (IMS 25 for handling voice deposit and retrieval, col. 1, ll 58-62).

Regarding claims 50 and 74, as shown in Fig. 1, Donovan teaches that at least one node (not defined, reads on a location where network server 23 and integrated messaging system 25 reside, excluding the service control entity 29 and location manager 31) coupled to the hub (a location where the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 reside) with a local area network (the service control entity 29, location manager 31, network server 23, and integrated messaging system 25 must be connected in a LAN) connection, wherein the node includes a single proxy (NS 23, col. 3, ll 10-12) and a single media server (IMS 25 for handling voice deposit and retrieval, col. 1, ll 58-62).

Regarding claims 51-52 and 75-76, Donovan fails to teach that the remaining of the gateways remain operational when one of the gateways fails and a load balancing switch for directing any of the at least one voice to the plurality of gateways as recited in the claims.

However, it would have been obvious to one skilled in the art to modify the teaching of Donovan to include configuring the plurality of gateways as explained in claim 43 to remain operational if one fails and to include a load balancing switch for directing any of the at least voice call to the plurality of gateways. The motivation/suggestion to do so would have been to provide stability and reliability to the entire system and to prevent any of the gateways from being overload which is a well known benefit of load balancing, respectively.

Claim 69 is a method claim corresponding to the combined system claims 43 and 45-47, therefore, is rejected under the same reason set forth in the rejection of claims 43 and 45-47.

Page 8

Application/Control Number: 10/632,649

Art Unit: 2663

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima May 5, 2005

PRIMARY EXAMINER